



Ca²⁺-Activated Chloride Channels and Phospholipid Scramblases

Guest Editors:

Dr. Anna Boccaccio

Institute of Biophysics, National
Research Council, I-16149
Genova, Italy

Dr. Simone Pifferi

Department of Experimental and
Clinical Medicine, Università
Politecnica delle Marche, I-60126
Ancona, Italy

Deadline for manuscript
submissions:

closed (31 December 2021)

Message from the Guest Editors

TMEM16A/Ano1 and TMEM16B/Ano2 form Ca²⁺-activated Cl⁻ channels that are involved in a variety of physiological functions, such as transepithelial ion transport, olfaction, phototransduction, smooth muscle contraction, nociception, cell proliferation and neuronal excitability.

Despite sharing a similar structural organization, other members of the TMEM16/Anoctamin family have a completely different molecular function: these so-called Ca²⁺ dependent phospholipid scramblases mediate the passive transfer of phospholipids between the leaflets of the membrane bilayer, causing the regulated collapse of membrane asymmetry. Mutations in several TMEM16/Anoctamin genes, TMEM16C/Ano3, TMEM16E/Ano5, TMEM16F/Ano6 and TMEM16K/Ano10, cause various genetic diseases, however their molecular physio-pathology is not established yet.

Following the recent progress on this unique protein family and with new techniques becoming available, these are exciting times to study all aspects of TMEM16 physiology.

This Special Issue calls for original research, full reviews, and perspectives that address the current knowledge in the field of Ca²⁺-activated chloride channels and scramblases.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI